Appl. No.: 09/924,542

Inventor: Mark C. Sullivan

Page 6 of 8

REMARKS

By the foregoing Amendment, claims 6, 9, and 14 have been amended. For the reasons discussed in the following remarks, Applicants respectfully request that the Examiner reconsider all outstanding rejections, and that they be withdrawn.

Rejection Under 35 U.S.C. §102(e)

At paragraph 2 of the Office Action, the Examiner rejected claims 9-13 as being anticipated by U.S. Patent No. 6,133,871 to Krasner ("Krasner"). Specifically, the Examiner relied on the process outlined in FIG. 3 of Krasner.

Applicant's claims 9-13. Specifically, Applicant notes that Krasner does not disclose storing a one millisecond segment of the GPS signal in a memory and converting the stored GPS signal to the frequency domain. As described by Krasner at step 110 of FIG. 3, Krasner first sums N consecutive PN frames, where N is typically 10. The resulting sum of the N consecutive frames is then subjected to an FFT process to produce a frequency domain representation. See col. 12, lines 41-50 and FIGS. 4A and 4B of Krasner. As thus described, Krasner performs an FFT calculation on an averaged frame, not a stored one millisecond segment of the GPS signal. For at least this reason, Applicant submits that Krasner does not disclose all of the claimed features of Applicant's claim 9. The anticipation rejection is therefore traversed. As claims 10-13 are dependent on independent claim 9 and incorporate all of the features of claim 9, Applicant also submits that the rejection of claims 10-13 are also traversed for at least the reason stated above.

Rejection Under 35 U.S.C. §103

At paragraph 4 of the Office Action, the Examiner rejected claims 6-8 and 14-20 as being unpatentable over Krasner in view of U.S. Patent No. 5,912,558 to Halamek et al. ("Halamek").

With respect to claim 6, the Examiner noted that Krasner shows all of the claimed features except for a "means for determining the carrier frequency based on the height of the peak."

Appl. No.: 09/924,542
Inventor: Mark C. Sullivan

Page 7 of 8

Halamek was therefore introduced to make up for this deficiency of Krasner. Even assuming that Halamek discloses all that the Examiner alleges, Applicant submits that the Examiner has not established a *prima facie* case of obviousness.

In the rejection, the Examiner relied on the process illustrated in FIG. 3 of Krasner. Applicant submits that Krasner does not disclose means for segmenting a stored GPS signal into a plurality of segments, each segment one millisecond in duration and an FFT process to perform an FFT on each segment. As described by Krasner at step 110 of FIG. 3, Krasner first sums N consecutive PN frames, where N is typically 10. The resulting sum of the N consecutive frames is then subjected to an FFT process to produce a frequency domain representation. See col. 12, lines 41-50 and FIGS. 4A and 4B of Krasner. As thus described, Krasner performs an FFT calculation on an averaged frame, not on each individual one millisecond segment of the GPS signal.

Here, the Examiner admits that Krasner does not disclose processing of one millisecond segments, then further notes that Krasner typically stores 100 to 1000 frames corresponding to a duration of 100 msec to 1 sec of the signal. This admission is based on col. 12, lines 8-15 of Krasner, which states:

At step 104 the remote unit's microprocessor 26 turns on power to the receiver front end 42, Analog to Digital Converters 44 and digital snapshot memory 46, and collects a snapshot of data of duration K PN frames of the C/A code, where K is typically 100 to 1000 (corresponding to 100 msec to 1 second time duration). When a **sufficient amount** of data has been collected, microprocessor 26 turns off the RF to IF converter 42 and the A/D converters 44. (Emphasis Added)

The Examiner then further contends that any "sufficient amount" of data can be collected and used. This contention, however, is contrary to the teaching of Krasner. The reference to "sufficient amount" occurs in the sentence immediately following the disclosed "typical" range that Krasner contemplates. The Applicant submits that additional evidence beyond a simple

Appl. No.: 09/924,542

Inventor: Mark C. Sullivan

Page 8 of 8

assertion of obvious is needed to justify the usage of one to two orders of magnitude less data in

the process.

For at least this reason, Applicant submits that the Examiner has not established a prima

facie case of obviousness. The obviousness rejection of claim 6 is therefore traversed. As claims

7 and 8 are dependent on independent claim 6 and incorporate all of the features of claim 6,

Applicant also submits that the rejection of claims 7 and 8 are similarly traversed for at least the

reasons stated above.

With respect to claims 14-20, the Examiner appears to use similar rationale to that

expressed with respect to claims 6-8. The rejection of claims 14-20 is therefore traversed for

reasons similar to that expressed above with respect to claims 6-8.

Conclusion

All of the stated grounds of rejection have been properly traversed, accommodated, or

rendered moot. Applicants therefore respectfully request that the Examiner reconsider all

presently outstanding rejections, and that they be withdrawn. The Examiner is invited to

telephone the undersigned representative if an interview might be useful for any reason.

Respectfully submitted,

Dated: 5/7/64

Law Office of Duane S. Kobayashi

By:

Duane S. Kobayashi

Reg. No. 41,122

1325 Murray Downs Way Reston, VA 20194

Tel: 703-464-7902

Fax: 703-935-0276